

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q77569

TANABE, Tadashi, et al.

Appln. No.: 10/663,749

Group Art Unit: 1644

Confirmation No.: 5604

Examiner: Kim, Y.

Filed: September 17, 2003

For: ANTIBODIES SPECIFIC TO HUMAN PROSTACYCLIN SYNTHASE

INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. §§ 1.97 and 1.98

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. §1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

All of the documents which are listed on the attached PTO/SB/08 A & B (modified) form are references of record in parent application numbers 10/608,536, 09/670,582, 09/037,758 or 08/578,709. Applicant is not submitting duplicate copies of these references but requests that they be listed on the face of any patent granted on the above application. (See 37 CFR §1.98(d)).

The present Information Disclosure Statement is being filed (without a Statement Under 37 C.F.R. § 1.97(e)) after the later of three months from the application's filing date and the mailing date of the first Office Action on the merits, but before a Final Office Action, Notice of

INFORMATION DISCLOSURE STATEMENT
U.S. Appl. No.: 10/663,749

Q77569

Allowance, or an action that otherwise closes prosecution in the application (whichever is earlier). The Commissioner is hereby authorized to charge the required fee under 37 C.F.R. § 1.17(p), in the amount of \$180.00, to Deposit Account No. 19-4880. A duplicate copy of this paper is attached.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

The USPTO is also directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. A duplicate copy of this paper is attached.

Respectfully submitted,



Drew Hissong
Registration No. 44,765

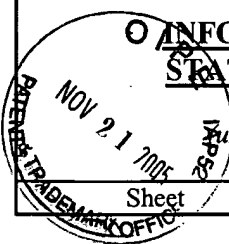
SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: November 21, 2005

Substitute for Form 1449 A & B/PTO		Complete if Known	
 <p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p>Use as many sheets as necessary)</p>		Application Number	10/663,749
		Confirmation Number	5604
		Filing Date	September 17, 2003
		First Named Inventor	TANABE, Tadashi
		Art Unit	1644
		Examiner Name	Kim, Y.
Sheet 1 of 2	Attorney Docket Number	Q77569	

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code ² (if known)		
		US			

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation ⁶
		Weksler, Heparin and Acidic Fibroblast Growth Factor Interact to Decrease Prostacyclin Synthesis in Human Endothelial Cells by Affecting Both Prostaglandin H Synthase and Prostacyclin Synthase; <i>J. Cell. Physiol.</i> , 142(3):514-522 (1990)	
		Hara et al., Isolation and Molecular Cloning of Prostacyclin Synthase from Bovine Endothelial Cells, <i>J. Biol. Chem.</i> 269:19897-19903 (1994)	
		Smith et al., Bimodal Distribution of the Prostaglandin I ₂ Synthase Antigen in Smooth Muscle Cells, <i>J. Biol. Chem.</i> , 258(9):5922-5926 (1983)	
		Smith et al., Purification, Quantitation, and Localization of PGI ₂ Synthase Using Monoclonal Antibodies, <i>Adv Prostaglandin Thromboxane Leukot Res.</i> 11:87-92 (1983)	
		S. Moncada, Eighth Gaddum Memorial Lecture. University of London Institute of Education, December 1980. Biological importance of prostacyclin. <i>Br J Pharmacol.</i> 76(1):3-31 (1982).	
		Gorman et al., Agonist-Specific Desensitization of PGI ₂ -Stimulated Cyclic AMP Accumulation by PGE ₁ In Human Foreskin Fibroblasts, <i>Prostaglandins</i> , 19(1):2-16 (1980).	
		Cytochrome P-450, Biochemistry, Biophysics and Environmental Implications, Proceedings of the 4 th International Conference on Cytochrome P-450 held in Kuopio, Finland, May 31-June 3, 1992, E. Hietanen et al., eds., pp. 103-106, 1982.	
		DeWitt et al., Purification of Prostacyclin Synthase from Bovine Aorta By Immunoaffinity Chromatography, <i>J. Biol. Chem.</i> , 258(5):3285-93 (1983).	
		M. Inoue, Molecular Characterization of the Prostacyclin Synthase, <i>Adv Prostaglandin Thromboxane Leukot Res.</i> 17A:29-33 (1987).	
		Pereira et al., Bovine Prostacyclin Synthase: Purification and Isolation of Partial cDNA, <i>Biochem. Biophys. Res. Comm.</i> 197(3):1041-1048 (1993)	
		T. Shimizu, Structure-function relationships of membrane-bound heme-enzyme, cytochrome P450, Institute for Chemical Reaction Science, Tohoku University, pp. 10-15, 1992	
		Salmon et al., Preparation and Assay of Prostacyclin Synthase, <i>Methods in Enzymology</i> , 86:91-99 (1982)	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or in the comment box of this document. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to indicate here if English language Translation is attached.

Substitute for Form 1449 A & B/PTO <u>INFORMATION DISCLOSURE</u> <u>STATEMENT BY APPLICANT</u> (use as many sheets as necessary)				<i>Complete if Known</i>	
				Application Number	10/663,749
				Confirmation Number	5604
				Filing Date	September 17, 2003
				First Named Inventor	TANABE, Tadashi
				Art Unit	1644
				Examiner Name	Kim, Y.
Sheet <u>2</u> of <u>2</u>				Attorney Docket Number	Q77569

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code ² (if known)		
		US			

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation ⁶
		Tanabe et al., Molecular Cloning of Prostacyclin Synthase From Bovine Endothelial Cells, in Eicosanoids & Other BioActive Lipids in Cancer, Inflammation and Radiation Injury, 3 rd Int'l Conf., Georgetown Conference Center, Washington D.C., pp 137, Oct. 13-16, 1993	
		Tanabe et al., Advances in Prostaglandin, Thromboxan and Leukotriene Research, Vol. 23, 1995, pp. 133-135	
		Govindarajan et al, Immunohistochemical distribution of renal prostaglandin endoperoxide synthase and prostacyclin synthase: diminished endoperoxide synthase in the hepatorenal syndrome. <i>Hepatology</i> 7(4):654-659 (1987)	
		Keirse et al., Does or can human placenta produce prostacyclin? <i>Placenta</i> 7(1):37-42 (1986)	
		Siegle et al, Characterization of monoclonal antibodies generated against bovine and porcine prostacyclin synthase and quantitation of bovine prostacyclin synthase, <i>FEBS Lett.</i> 347(2-3):221-5 (1994)	
		Dewitt et al., Monoclonal antibodies against PGI ₂ synthase: an immunoradiometric assay for quantitating the enzyme. <i>Methods Enzymol.</i> 86:240-246 (1982)	
		Moonen et al., Immunohistochemical localisation of prostaglandin endoperoxide synthase and prostacyclin synthase in pregnant human myometrium. <i>Eur J Obstet Gynecol Reprod Biol.</i> 19(3):151-158 (1985)	
		Harlow et al, Antibodies a Laboratory Manual, Cold Spring Harbor Laboratories, 1989, Chap. 8, pp. 283-318	
		Satoh et al., Role of prostaglandins in pregnancy-induced hypertension, <i>Am. J. Kidney</i> , 17(2):133-138 (1991)	
		Gryglewski et al., Prostacyclin and Vascular Disease, <i>Philos. Trans. R. Soc. Lond. B. Biol. Sci.</i> , 294(1072):383-388 (1981)	
		Pereira et al., Molecular Cloning and Characterization of Bovine Prostacyclin Synthase, <i>Biochem. Biophys. Res. Commun.</i> 203(1):59-65 (1994)	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or in the comment box of this document. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to indicate here if English language Translation is attached.